Time Slicing Device for Shared Resources and
Method for Operating the Same

ABSTRACT OF THE DISCLOSURE

5   Broadly speaking, a device for addressing a shared resource is disclosed. The device includes at least one register in communication with the shared resource. The at least one register is configured to hold an address that is to be provided to the shared resource upon receipt of a clock signal. The device also includes a multiplexer for providing a next address to the at least one register. The multiplexer is disposed outside

10   of a critical timing path for addressing the shared resource. The device for addressing the shared resource allows multiple users to be connected to the shared resource without adversely affecting both a speed of the shared resource and a number of users that can be achieved in an actual implementation of the shared resource.